

Title (en)
Zero slump-loss superplasticizer.

Title (de)
Betonverflüssiger ohne Verarbeitbarkeitverlust.

Title (fr)
Additif superplastifiant sans perte d'ouvrabilité.

Publication
EP 0612702 A1 19940831 (EN)

Application
EP 94102312 A 19940216

Priority
IT MI930366 A 19930225

Abstract (en)
A superplasticizing additive for concrete and other cementitious mixes with high retention of workability (low "slump loss") and low air-entraining effect, is made by terpolymers of a) (meth)acrylic acid and its salts, b)polyethyleneglycolmonomethylether-(meth)acrylate and c) polypropyleneglycol-di(meth)acrylate.

IPC 1-7
C04B 24/26; **C04B 28/06**; **C08F 220/06**

IPC 8 full level
C04B 24/26 (2006.01); **C04B 24/32** (2006.01); **C04B 28/06** (2006.01)

CPC (source: EP KR US)
C04B 24/2647 (2013.01 - EP KR US); **C04B 24/2694** (2013.01 - EP KR US); **C04B 24/32** (2013.01 - EP US); **C04B 28/06** (2013.01 - EP KR US); **C04B 2103/0061** (2013.01 - EP KR US); **C04B 2103/308** (2013.01 - EP KR US); **C04B 2103/32** (2013.01 - EP KR US)

C-Set (source: EP US)
1. **C04B 28/06** + **C04B 24/2647**
2. **C04B 24/32** + **C04B 2103/0061**
3. **C04B 2103/0061** + **C04B 24/2647** + **C04B 24/32**

Citation (search report)
• [DA] CHEMICAL ABSTRACTS, vol. 115, no. 4, 29 July 1991, Columbus, Ohio, US; abstract no. 34398u, A. OTA ET AL page 314; & JP H02281014 A 19901116 - NISSO MASTER BUILDERS KK
• [A] CHEMICAL ABSTRACTS, vol. 107, no. 8, 24 August 1987, Columbus, Ohio, US; abstract no. 63805q, M.RUY ET AL page 298; & JP S6234977 A 19870214 - MITSUI TOATSU CHEMICALS
• [AP] PATENT ABSTRACTS OF JAPAN vol. 017, no. 659 (C - 1137) 7 December 1993 (1993-12-07)

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Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

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EP 0612702 A1 19940831; **EP 0612702 B1 19961127**; AT E145638 T1 19961215; CA 2116381 A1 19940826; CA 2116381 C 20040622; DE 69400968 D1 19970109; DE 69400968 T2 19970403; DK 0612702 T3 19970428; ES 2095690 T3 19970216; GR 3022575 T3 19970531; HK 1006449 A1 19990226; IT 1263969 B 19960905; IT MI930366 A0 19930225; IT MI930366 A1 19940825; KR 100287301 B1 20010416; KR 940019644 A 19940914; PH 30174 A 19970121; TW 266200 B 19951221; US 5362324 A 19941108

DOCDB simple family (application)
EP 94102312 A 19940216; AT 94102312 T 19940216; CA 2116381 A 19940224; DE 69400968 T 19940216; DK 94102312 T 19940216; ES 94102312 T 19940216; GR 970400261 T 19970217; HK 98105754 A 19980619; IT MI930366 A 19930225; KR 19940003330 A 19940224; PH 47832 A 19940224; TW 83101592 A 19940224; US 20137794 A 19940224